Allegan County Transportation

Section 5313(b)
SDNT Grant

Advanced Rural Transportation Management Software

Prepared for MDOT

Completed
December 15, 2008

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ACT services provided on annual basis:

2005
Hours 15,353
Trips 36,673
Miles 350,573

2006
Hours 15,046
Trips 35,926
Miles 371,686

2007
Hours 18,440
Trips 39,420
Miles 469,650

2008
Hours 27,666
Trips 44,989
Miles 676,495

2009 - projected
Hours 32,680
Trips 48,300
Miles 785,060

Allegan County Transportation (ACT) - A rural county reservation transit system. ACT provides limited service to the general public, mostly for employment, seniors, persons with a disability and youth.

1 Problem Statement

In rural Allegan County many of the trip requests are scattered throughout remote areas of the county. There is a need to have effective dispatching, scheduling and tracking software. With limited resources and equipment it is imperative that efficient scheduling software is used.

Many of the products available today cater to the fixed route urban transit needs and do not address the rural demand-response type of system. With the implementation of automated dispatch software the reservation service could be grown and integrated with the demand response trips.

Allegan County Transportation is lacking automated trip reporting that is integrated with the billing process. It is felt that with improving tracking and reporting capabilities, additional contract services for transportation could be acquired.

All data collection is currently done manually. There is a need to reduce potential data entry errors and reduce customer scheduling times. The project will be completed by Allegan County in-house.

2 Solution

Ultimately it is the goal of Allegan County Transportation to demonstrate the need for Dispatch Scheduling Software and develop a selection process others can use.

2.1 Project Objectives

To review and select an advanced rural transportation management software. The software should enable Allegan County to have flexibility and control over client management, vehicle management, automated scheduling, use and collect GIS data, with integrated reporting and invoicing abilities. The ideal software should be WEB enabled, and be upgradeable.

The project goals:

1. Reduce the cost per trip.
2. Reduce the passenger ride time.
3. Decrease customer scheduling time and missed trips.
4. Improve data collection.
5. Further utilize the County GIS mapping and database.

2.2 Project Description

First we assembled a review team consisting of: The Project Manager, Information Services Department, GIS Department, Grants Manager, Operation Manager, and Dispatcher. We then established the criteria for the evaluation process. Products were reviewed and evaluated. Information was collected for use by MDOT and other transit agencies to best identify software applications for rural transportation needs. We implement the product with the most advantages in relation to cost, flexibility and compatibility with the current County operating system including GIS data.

2.3 Products and Deliverables

This project will include the purchase of Automated Scheduling Software. The software will accommodate up to five users. Cost included installation, data conversion, data set-up, and training. The equipment hardware was: One server required licenses. Existing computer terminals were used.

- Trip Management
- Client Data Base
- Mapping with GIS

Software should not only improve efficiencies, but also collect useful data.

3 Implementation Plan

Several steps were taken to solicit, review products and select a final product.

3.1 Methodology

It was decided by the project team to submit a request for information (RFI). This would allow for a review of all product features and benefits. The team would then prioritize options necessary to meet the project goals. The team would then submit a request for proposal (RFP) with specific software requirements. Through this process the team could then select a vendor based on the bidder's ability, capacity, skill to perform, past experience and base price.

3.2 Schedule

Allegan County was unable to complete the project with the following schedule do to a number of circumstances, but it is reasonable to believe that the following time line will be sufficient in most cases.

1. Develop and submit RFI – 3-4 Months
2. Review and select product options – 30 Days
3. Develop and submit RFP – 3-4 Months
4. Review and select final vendor – 30 Days
5. Award Contract to vendor – 90 Days
6. Implement new software – 60-90 Days
7. Go live, become proficient – 90-180 Days

3.3 Product Review – Vendor Comparison

A "Request for Information" (RFI) was developed stating the software needs for ACT. A sample of the ACT RFI is attached as "Attachment A". The vendors to respond to the original RFI were the following:

- EnGraph
- PC Trans
- Route Match
- Trapeze
- Versyss/TranSched

Site visits, interview with active users, product Demos and sample reports can be very useful.

All vendors provide a proposal offering a variety of features and services. A comparison of their response is provided in "Attachment B". All vendors met the minimum requirements. The top three from the RFI evaluation were offered an opportunity to give a live presentation. PC Trans, Route Match and Trapeze did give a live presentation.

THE AREAS OF INTEREST IN THE RFI:

1.1	GENERAL SOFTWARE REQUIREMENTS
1.2	GEOGRAPHICAL INFORMATION SYSTEM (GIS)
1.2.1	MAPPING MODULE REQUIREMENTS
1.2.2	SPATIAL FUNCTIONS
1.3	PARATRANSIT SOFTWARE SYSTEM REQUIREMENTS
1.3.1	CLIENT REGISTRATION
1.3.2	CALL ENTRY AND SCHEDULING
1.3.3	DISPATCHING
1.3.4	REPORTING
1.3.5	BILLING
1.4	VEHICLE Monitoring
1.5	INTERFACE
2.0	GIS REQUIREMENTS
2.1	TRIP SCHEDULING AND DISPATCHING
2.2	REPORTS
3.0	OTHER REQUIREMENTS
3.1	TECHNICAL SUPPORT
3.2	TRAINING
3.3	COMPANY AND KEY PERSONNEL
3.4	DOCUMENTATION:
3.5	REFERENCES:
3.6	SYSTEM REQUIREMENTS
3.7	TRAINING:
4.0	LIMITATION AND AWARD

After the Live presentation a Request for Proposal" (RFP) was developed. This listed the specific features and options needed by ACT. A sample of the ACT RFP is attached as "Attachment C".

3.4 Final Selection

In the RFP there were four main areas of cost comparison: Software, Data Acquisition/Conversion, Training and Technical Support. In addition to price, the following criteria were used to select the final vendor:

- The bidder's ability, capacity, and skill to perform the contract or provide the supplies, material, equipment or services required promptly, or within the specified time, without delay or interference.
- The character, integrity, reputation, judgment, experience, and efficiency of the bidder.
- The bidder's previous and existing compliance with contracts, purchase orders, or services.
- The bidder's previous and existing compliance with laws and ordinances relating to contracts, purchase orders or services.
- The sufficiency of the financial resources of the bidder to perform the contract or provide the supplies, materials, equipment or services.
- The availability and adaptability of the supplies, materials, equipment or contractual services to the particular use required.
- The bidder's ability to provide future maintenance and service subject of the contract or purchase order.
- The number or scope of the conditions attached to the bid by the bidder.

In the bid review process both Trapeze/Novus and Route Match demonstrated a great product to offer the transportation community. They both appear to be quality companies who spent considerable time and efforts to advertise and market their products. In each case when ACT had questions on their product and or its capabilities, their staff was knowledgeable. Both Trapeze/Novus and Route Match provided great hands on opportunities to review the product. LIS had several conversations with both Trapeze and Route Match and found both vendors to be knowledgeable and responsive although getting an answer often required consultations among the sales representative, the software developer and the GIS expert at each company. To its credit, Trapeze did address the county's desire to use its own GIS data in responding to the RFP while Route Match initially responded with a solution that used commercial GIS data.

"Attachment D" is the comparison on features and cost for each response to the RFP. "Attachment E" is the original Recommendation from the project team.

It was original determined that Trapeze Novus had a slight advantage over Route Match with the implementation process. The original bid was awarded to Trapeze Novus. During the Contract development phase with Trapeze it was apparent a final agreement could not be met. Trapeze Novus and Allegan County chose not to move forward on the software agreement. The County Board of Commissioners then chose to rescind it original board action to

award the contract to Trapeze Novus, the County Board then took action to award the contract to Route Match.

4 Installation

Once the agreement was in place with Route Match, Act began the implementation process. ACT and Route match used the following process:

- Kickoff Meeting
- Operation Assessment
- Gather Reporting Requirements
- Gather Billing Requirements
- Data Collection
- Software Configuration
- Software Install
- Level I Training
- Software Configuration Continued
- Data Import
- Level II Training
- Standard Go-Live
- Handoff to Support

The process was implemented over a 60 day time period.

5 Conclusion – Six month review

The Go-Live process went very smoothly, but at a very fast pace. Fortunately ACT had experienced staff that had basic knowledge of software implementation. Route Match staff was on hand to trouble shoot any problems and to provide support. In the first two to three weeks there was a significant increase of vehicle usage. As we learned the booking and scheduling process, vehicle efficiency did increases. It became apparent after several weeks that while the RouteMatch PM (Computer Assisted) was great improvement over the manual process ACT was use to, the RouteMatch TS (Fully Automated) was the system we were in need of.

Lessons learned:

- Seek maximum training time.
- Extend practice time on training data base.
- Fully review the billing process/set-up before go-live
- Seek additional references on tech support.

Over the past six month ACT has had some problems with the Route Match software. Most of the issues have not prevented or stopped daily operations, but have added significant time for the scheduler. Several issues to date have not been resolved, but are in product development for review.

Allegan County Transportation is satisfied with the options and features RouteMatch has to offer. ACT is confident this product will meet the needs of the transit system.

Appendix: List of Attachments

- **Attachment A - Sample Transit Dispatch RFI**
- **Attachment B - Informational Sheet Comparison**
- **Attachment C - Sample Transit Dispatch RFP**
- **Attachment D - Bid review TRA-1006 with 5yr cost**
- **Attachment E - Dispatch Vendor chosen document**